



MISSOURI STATE RECYCLING PROGRAM

2016 ANNUAL REPORT



Acknowledgements

Published by the State of Missouri, Office of Administration, Division of General Services

Special thanks to the Department of Natural Resources' - Solid Waste Management Program, Missouri Interagency Recycling Committee (MIRC), Missouri's Market Development Program, and department recycling coordinators and purchasing staff who contributed to this report. The Missouri State Recycling Program thanks all state employees for their ongoing efforts to reduce, reuse, recycle, and buy recycled-content products.

*State of Missouri
Office of Administration
Division of General Services
301 W. High Street, P.O. Box 809
Jefferson City, MO 65102-0809
<http://oa.mo.gov/general-services/missouri-state-recycling-program>*

Questions, comments or suggestions regarding this report or the State Recycling Program may be directed to the State Recycling Coordinator.

*Robert Didriksen
PH: 573.751.3384
Robert.Didriksen@oa.mo.gov*

Cover Page

The graphic on this year's cover page shows Missouri super-imposed on a likeness of the globe. This graphic was selected to show that not only is recycling local in nature, but also illustrates that our day-to-day recycling habits connect us to many other places. Our scrap materials are exported to various countries to be utilized as raw materials in the manufacture of new products.

A special thank you to the Department of Economic Development's (DED) Marketing and Communications Team for providing the graphic on the front cover of this report and DED's Energy Division for calculating the economic and environmental savings of state government recycling (see p.14).



Eric R. Greitens
Governor



Post Office Box 809
Jefferson City, Missouri
65102

Sarah H. Steelman
Commissioner

State of Missouri
OFFICE OF ADMINISTRATION
Division of General Services
760 Truman Building, 301 W. High Street

gsmail@oa.mo.gov
<http://www.oa.mo.gov/gs>

Cynthia A. Dixon
Acting Division Director
(573) 751-4656
FAX: (573) 751-7819

I am honored to present the Missouri State Recycling Program's Annual Report.

In accordance with RSMo 34.031, the Office of Administration is submits the Fiscal Year 2016 (FY16) Annual Recycling Report to summarize state government's accomplishments in the areas of recycling, waste reduction, and recycled content product procurement for the period of July 1, 2015 through June 30, 2016.

State law directs state agencies to implement policies for recycling, waste reduction, and procurement of recycled content products. The Missouri State Recycling Program, administered by the Office of Administration, Division of General Services, is responsible for assisting state agencies in these areas. The State Recycling Program works cooperatively with the Missouri Interagency Recycling Committee (MIRC) to facilitate recycling and waste reduction by state employees.

As a result of the efforts of state employees and MIRC, the Recycling Program continues to register solid financial returns and steady development of the State's recycling collection infrastructure. State employees continue to reduce the amount of waste generated at state facilities and the related costs of waste disposal. Recycling and waste reduction highlights from FY16 include:

- ♻ 11,872,971 pounds of materials recycled.
- ♻ 213 billion BTUs of energy saved from total pounds of material recycled. This is equivalent to the annual energy consumption of 1,858 homes.
- ♻ \$13,316,704 of recycled-content products purchased.
- ♻ \$156,226 in revenue generated for the state recycling fund.
- ♻ \$274,303 in waste disposal costs avoided.

Waste reduction achievements of several agencies are summarized on pages 16 – 21 of this report. We appreciate the support of the General Assembly in our recycling efforts.

Sincerely,

A handwritten signature in black ink that reads "Cynthia Dixon".

Cynthia A. Dixon
Acting Division Director

Table of Contents

I. Missouri State Recycling Program Organization (p. 5 - 6)

II. FY16 Overview (p. 7 - 22)

State Recycling Program Goals (p. 7)

Collection of Recyclables (p. 8 - 14)

- Recycling Rankings - Including Recycled-Content Procurement
- Local Recycling Services Contracts: Jefferson City | Kansas City | St. Louis
- Statewide Recycling Services
- Measuring Economic and Environmental Savings of Materials Recycled

FY16 Annual Recycling Awards (p. 15)

State Agency Waste Reduction / Recycling Accomplishments (p. 16 - 20)

- Recycling Interns
- Avoided Costs of Waste Disposal
- State Recycling Organizational Changes
- Remanufactured Toner Cartridges: State Agency Savings
- Earth Day & Zero Waste Challenge
- Carpet Recycling
- Reuse on the Rise
- RecycleMania

Recycled Content Procurement (p. 21)

- State Agencies “Close the Loop” with Paper Procurement

Missouri’s State Recycling Fund (p. 22)

- Summary of Revenues & Expenses
- Sources of Revenue
- Contributions to the Heating Assistance Program (Utilicare)

III. Recycling Resources (p. 23)

IV. Appendices (p. 24 - 28)

- Appendix A: FY16 Department Reports of Materials Recycled
- Appendix B: FY16 Department Reports for Recycled Content Procurement

I. Missouri State Recycling Program Organization

What is the Missouri State Recycling Program?

The Missouri State Recycling Program (**MSRP**) was established in 1989 when legislation added sections 34.031 and 34.032 to Chapter 34 of the MO Revised Statutes. The purpose of the **MSRP** is to assist State of Missouri government agencies with:

- **Procurement** of products manufactured with recycled materials.
- Coordinating **waste reduction** strategies.
- Overseeing the **collection** of recyclables by establishing recycling services contracts.

Who is the MSRP?

There are three components to the **MSRP's** organizational chart.

The **state recycling coordinator** is dedicated to the planning and administration of recycling and waste reduction activities.

The **Missouri Interagency Recycling Committee** serves an important purpose by providing input on recycling initiatives and communicating with state employees about various recycling programs.

The efforts of **state employees** to recycle ensures the success of any recycling initiative. State employees that recycle are considered a part of the **MSRP**.



Office of Administration | General Services | 573-751-3384

What is the Missouri Interagency Recycling Committee?

The Missouri Interagency Recycling Committee (**MIRC**) was established in 1994. It was recognized the **MSRP** needed a way to communicate procurement and recycling policies throughout state government. **MIRC** is a vital component of the **MSRP** and meets regularly to discuss recycling collection, waste reduction, recycling market conditions and recycled product procurement.

Who is MIRC?

The Recycling Committee is composed of representatives from various state departments (executive, judicial, and legislative). To learn more about recycling in your department, please contact your **MIRC** member.

A list of members is located on the internet at <http://oa.mo.gov/general-services/state-recycling-program/missouri-interagency-recycling-committee-mirc>

Missouri Interagency Recycling Committee (MIRC)

By communicating “buying recycled” procurement and recycling collection programs to their respective departments, MIRC members function as the core of the Missouri State Recycling Program (MSRP). The work of committee members varies - from providing important input regarding MSRP projects such as recycling contracts to monitoring recycling containers to ensure these are being emptied.



MIRC Meeting at Runge Conservation Nature Center

Each year MIRC members are involved with the annual recycling award process by submitting and voting on the nominations. Another yearly process requiring MIRC member attention is the annual recycling questionnaire. The questionnaire is a key component for collecting data for the annual recycling report. Results of the FY16 recycling questionnaire can be found on pages twenty-one, and twenty-five through twenty-eight of this report. The annual reporting process provides an important assessment of state government recycling efforts each fiscal year.

MIRC members also assist with recycling at numerous events throughout the year - including the Department of Natural Resources' Earth Day celebration and the Missouri State Fair.

2016 MIRC Members



L. to R. Sitting: Sara Hagenhoff (DESE), Jim Aslakson (MDC), Rhonda Dormire (DHSS), Barbara Li (MDC) | **Standing:** Gary Burlingame (DOR), Greg Bernskoetter (DED), Leslie Winter (DHE), Gary Stoll (DOC), Dawn Korsmeyer (Supreme Court), Anita Stansfield (DNR), Kristin Tipton (EIERA), Stacia Steinman (DPS-DO), Rob Didriksen (OA), Deb Goodman (DPS-MOANG) | **Not Pictured:** Jonathan Thompson (OA), Glenda Vanderfelsz (OA), Alan Clements (MDA), Karen Wood (MDA), Jennie Rees (MVE), Ron Doerhoff (DED), Lisa Morris (DESE), Leroy Wade (DHE), Kim Sandbothe (DIFP-Finance), Debbie Davis (DIFP-Credit Unions), Leann Lorts (DIFP-PR), Terry Doerhoff (DOLIR), Mike Haake (DMH), Jeff Heisler (DNR), Connie Patterson (EIERA), Lisa Tyree (DPS-MOANG), Bruce Lehmen (DPS-MOANG), Brenda Davis (DOR), Mitch Kolb (Lottery), Stacey Jacobs (STC), Kevin Baclesse (DSS), Stowe Johnson (MoDOT), Sarah Kleinschmit (MoDOT), Jeff Thomas (MCHCP), Ron Childs (MOSERS), Kim Hoelscher (Governor), Kerry Kroll (AGO), Mark Henley (Auditor), Tom Nield (SOS), Nancy Tennison (Treasurer), Don Dickey (Supreme Court), Angie Bisges (OSCA), Greg Sandbothe (House of Reps), Jon Burton (Senate), Barbara Morrow (HSSU), Benny Lewis (HSSU), Heidi Carlin (MSSU), Craig Darrough (MWSU), John Viau (NWMSU), Sarah Steinerd (SEMO), Angie Mitchell (SEMO)

II. FY16 Overview: State Recycling Program Goals

FY16 Goals

Goal #1: Increase the percentage of recycled content writing instrument purchases to greater than 7.26%

Background: An important part of the recycling process is to purchase products made from recycled materials. This is commonly referred to as “closing the loop”. Procurement of recycled-content products helps to insure there are markets for scrap materials such as paper and plastic. In addition, RSMo 34.031 states, “The commissioner of administration … shall give full consideration to the purchase of products made from materials recovered from solid waste …”

Procurement of writing instruments (pens, pencils, etc.) made from recycled-content materials by state agencies in FY14 and FY15 from the statewide office supplies contract were 4.98% and 7.26% respectively.

Results: Contractor supplied procurement reports indicate the percentage of recycled-content writing instruments purchased by state agencies increased to 8.13% of overall purchases in FY16.

Percentage of Recycled Content Pens Purchased

Fiscal Year	Recycled	Virgin	Total (recycled+ virgin)	Percent of Purchases with Recycled Content
FY14	\$13,784	\$262,948	\$276,732	4.98%
FY15	\$15,724	\$200,794	\$216,518	7.26%
FY16	\$20,760	\$234,586	\$255,346	8.13%

Goal #2: Further reduce the amount of 3-ring binder purchases by promoting the reuse of binders within state government.

Background: In FY13, FY14, and FY15 state agencies purchased \$163,765, \$189,936, and \$155,250 respectively of 3-ring binders from the statewide office supplies contract. Average annual purchases of 3-ring binders for these three years is \$169,650. (see chart on p. 19)

Numerous state agencies utilize the Purchasing Committee listserv to dispose of 3-ring binders to other state agencies for reuse (see p. 19 of this report). By promoting the reuse of 3-ring binders within state government, procurement of 3-ring binders is expected to be reduced.

Results: Contractor supplied procurement reports show total 3-ring binder purchases by state agencies in FY16 of \$140,701. The FY16 total is 17% less than the three year average total cost of 3-ring binders of \$169,650.

FY17 Goals

Goal #1: Create a new process to measure paper procurement.

Goal #2: Establish a pilot organics recycling service for state agencies in Jefferson City

Goal #3: Establish a network of recycling teams at state buildings in St. Louis

FY16 Overview: Collection of Recyclables

FY16 Recycling Rankings

Where Does All of This Information Come From?

Each year the State Recycling Program distributes the annual recycling questionnaire to state agencies through the MO Interagency Recycling Committee (MIRC). The questionnaire serves several purposes which include:

- Informing state employees and agencies about available recycling services.
- Communicating to employees the amounts of materials recycled via state contracts as well as dollar amounts of recycled products purchased from state contractors.
- Requesting collection data to quantify amounts of materials recycled.
- Requesting procurement data to quantify dollars spent on recycled-content products.

A summary of the results of this information gathering process is provided on this page. For more detailed information please see

Appendices A and B.

Recycled-Content Product Purchases Over \$100,000		
1.	Paper Products	\$6,222,594
2.	Metal Products	\$4,712,804
3.	Office Supplies	\$609,054
4.	Plastic Bags	\$590,036
5.	Remanufactured Printer Cartridges	\$371,779
6.	Remanufactured Furniture	\$315,979
7.	Carpet / Construction Materials	\$277,960
8.	Cardboard Boxes	\$107,523

Scrap Materials Where More Than 10,000 pounds Was Recycled		
1.	Scrap Metal	4,049,216
2.	Mixed Paper	3,003,194
3.	Cardboard	1,922,599
4.	Tires	794,933
5.	Tin / Steel Cans	759,421
6.	Food / Yard Waste	388,100
7.	Electronics	349,048
8.	Aluminum	245,327
9.	Commingled Materials	115,816
10.	Plastic	58,622
11.	Rechargeable Batteries	50,729
12.	Magazines & Catalogs	27,910

Top 3 “Number of Gallons” Recycled		
1.	Gasoline	137,370
2.	Diesel	70,889
3.	Motor Oil	30,532

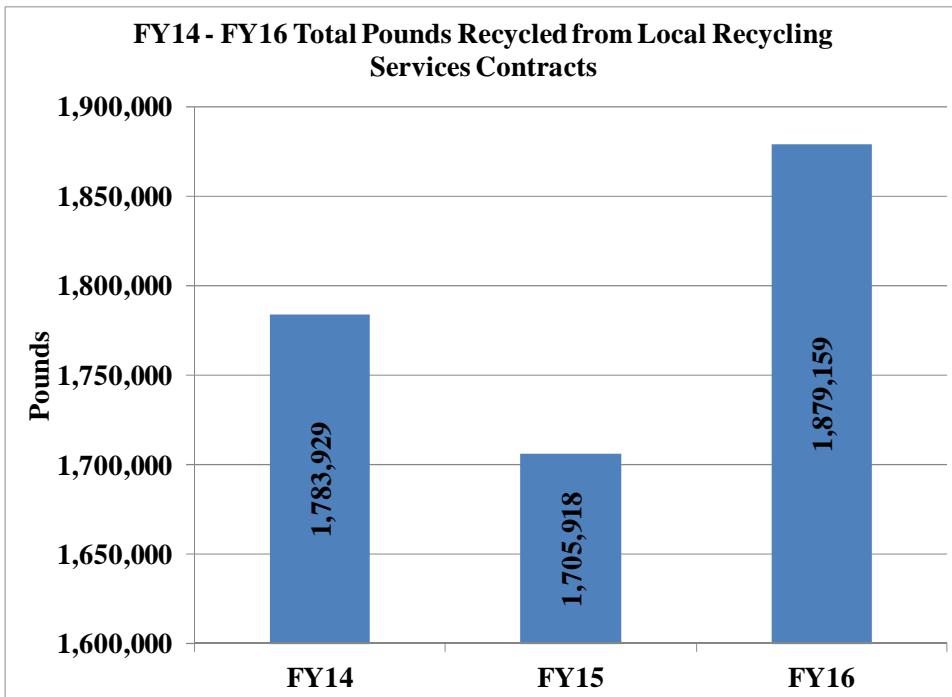
Top 3 “Number of Items” Recycled		
1.	Fluorescent Lamps	24,114
2.	Printer Cartridges	16,068
3.	Pallets	13,622

State Agencies Recycling More Than 10,000 Pounds		
1.	MoDOT	4,136,808
2.	Department of Corrections	2,760,124
3.	Department of Revenue	635,548
4.	Department of Public Safety	537,032
5.	Secretary of State	338,399
6.	Department of Natural Resources	317,532
7.	Department of Mental Health	296,499
8.	Office of Administration	135,106
9.	Department of Health & Senior Services	51,452
10.	Department of Social Services	40,629
11.	Department of Agriculture	22,865
12.	Department of Conservation	18,964

Local Recycling Services Contracts

During FY16 the Missouri State Recycling Program administered three local recycling services contracts. State agencies in Jefferson City, Kansas City, and St. Louis had access to recycling services under these contracts for recycling of office paper and cardboard. In the Jefferson City and St. Louis areas, the contracts provided state agencies with an option to recycle commingled materials such as plastic bottles and aluminum cans. Here is a summary of the total pounds of material collected for recycling in FY16.

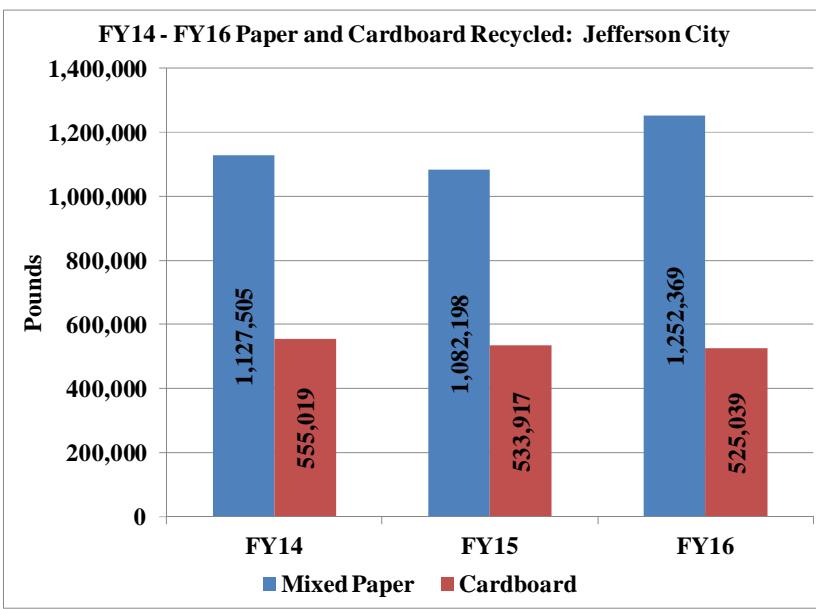
	<u>Kansas City</u>	<u>St. Louis</u>	<u>Jefferson City</u>	<u>Material Totals</u>
Mixed Paper	7,772	12,513	1,251,369	1,271,654
Cardboard	9,848	1,875	525,039	536,762
Commingled	1,225	33,069	—	34,294
Aluminum	—	—	18,424	18,424
Plastic	—	—	13,588	13,588
Steel (tin) Cans	—	—	4,437	4,437
Total Pounds	18,845	47,457	1,812,857	1,879,159



Local Recycling Services Contracts

Jefferson City

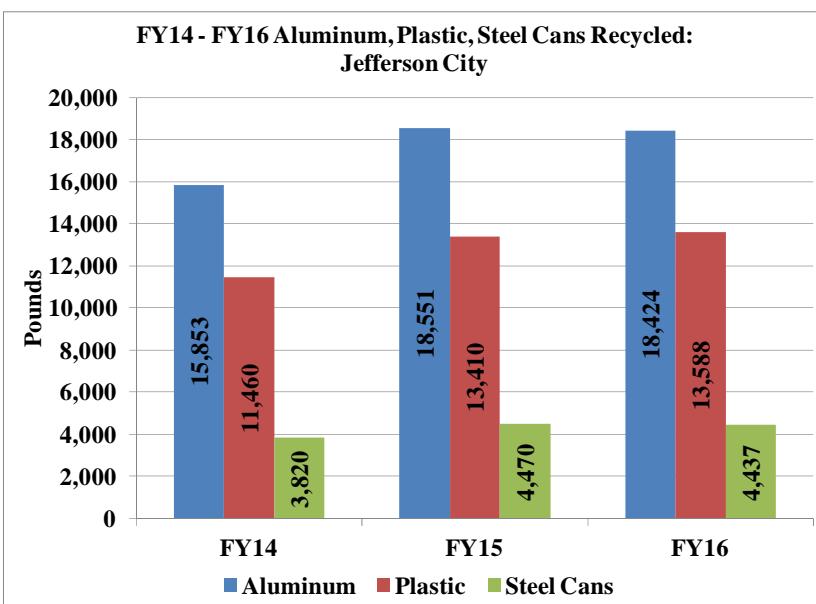
Mixed paper is the most recycled material by weight and volume by state agencies in Jefferson City. There were approximately eighty locations recycling mixed paper in FY16. State agencies recycled an average of over 24,000 pounds of paper each week in FY16. There was about a two percent increase in the amount collected in FY16 as compared to FY15. The increase can be attributed to the Department of Revenue utilizing the Jefferson City Recycling Services contract instead of its own paper recycling contract.



There were approximately fifty locations collecting cardboard for recycling in FY16. Total cardboard collected - including baled and loose material - amounted to an estimated 525,039 pounds. This amount includes 112,182 pounds of baled cardboard collected from the Truman Building, Department of Revenue warehouse, and the Highway Patrol warehouse. This means on average more than 10,000 pounds of cardboard is recycled per week by state employees in Jefferson City.

There were forty-five locations on the commingled beverage container collection route in FY16. Collections of beverage containers in FY16 stayed about the same as compared to FY15. State agencies recycled a total of 18,424 pounds of aluminum cans; 13,588 pounds of plastic bottles; and 4,437 pounds of steel cans in FY16.

The subcontractor, Kingdom Projects (a sheltered workshop), provided collection services for cardboard and commingled materials — sorting beverage containers at their recycling facility located in Fulton.

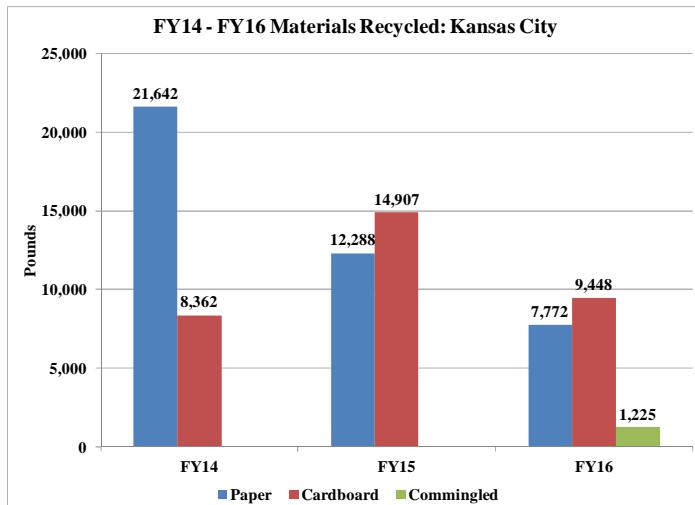


Local Recycling Services Contracts

Kansas City

For the majority of FY16 the Kansas City contract offered state agencies the chance to recycle cardboard and mixed office paper. However, the contract expired in March, 2016.

After the contract expired the State Recycling Program began paying for recycling services at the Fletcher-Daniels State Office Building and a leased property located at 3717 S Whitney Ave.



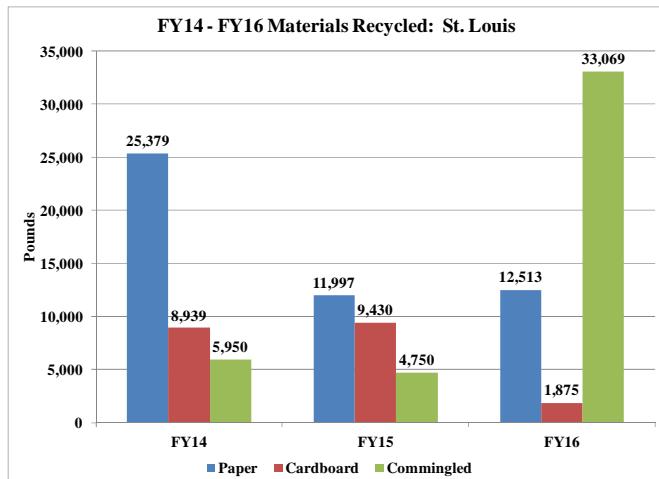
The drop in the amount of paper and cardboard recycled in FY16 as compared to FY15 is a result of four fewer locations recycling through a contract for the last 3 months of FY16. Total amount of commingled material recycled at 3717 S Whitney in FY16 was 1,225 pounds. (see chart above)

The State Recycling Program will continue to evaluate options to expand recycling in Kansas City.

St. Louis

A couple of different recycling collection strategies evolved for the nine state agency locations recycling in St. Louis in FY16.

One collection method involved the use of recycling dumpsters. The recycling dumpster system required all materials (paper, cardboard, cans, and bottles) to be collected in the same container. This is also known as commingled recycling.



Since six out of the nine locations recycling in St. Louis transitioned to the recycling dumpster system, there was a big increase with commingled recycling in FY16.

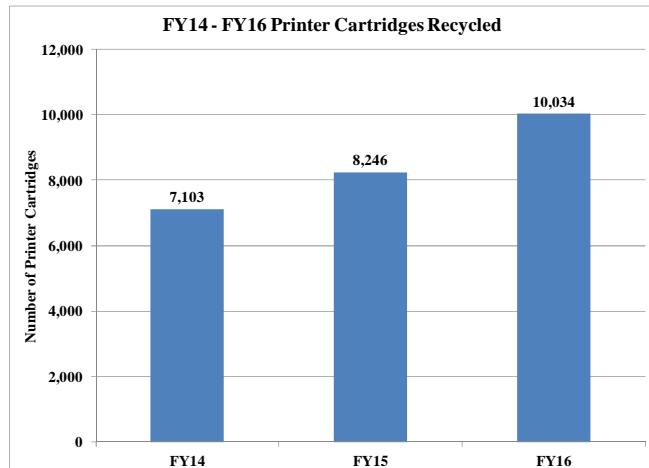
The other three locations in St. Louis used the cart collection system to recycle. The cart collection system allows for fiber materials such as paper and cardboard to be kept separate from other materials such as aluminum and plastic.

The primary reason for transitioning from a cart collection system to a dumpster collection system is that recycling dumpsters are a more economical way to collect materials for recycling. This is especially important in a geographically large area such as St. Louis where there is considerable distance between pickups.

Statewide Recycling Services

No-Cost Services

The Missouri State Recycling Program administered two no-cost statewide recycling services for state agencies in FY16. These convenient services allowed state employees to recycle printer cartridges or rechargeable batteries. In addition, the program administered two fee-based contracts for document destruction and lamp recycling.



Printer Cartridge Recycling

State agencies have numerous options for recycling printer cartridges. The chart to the right details only those recycling activities where state agencies used the State Recycling Program's printer cartridge collection service or Missouri Vocational Enterprises' (MVE) service.

Agencies that returned printer cartridges to the "original equipment manufacturer" (OEM) are not accounted for in this chart. The total number of printer cartridges recycled or remanufactured through these agencies increased 22% in FY16 as compared to FY15.



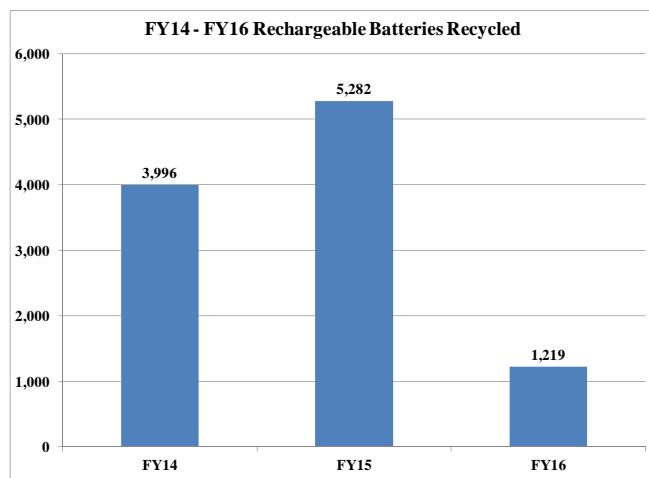
Pallets of printer cartridges ready to ship to a cartridge remanufacturing facility

The 22% increase is attributable to collaborative efforts between MVE, Highway Patrol, Department of Social Services, Department of Public Safety, State Treasurer's Office, and several other agencies to utilize the collection system set up by the State Recycling Program.

Rechargeable Battery Recycling

Nine departments utilized the rechargeable battery recycling service in FY16 recycling 1,219 pounds of rechargeable batteries.

There was a big drop in collection amounts in FY16 as compared to FY15. This may be attributable to the number of inactive locations doubling from 8 (FY15) to 16 (FY16). An inactive location means the location is still registered, but did not ship any batteries during the reporting period.



Over the past ten years, Missouri state government efforts have resulted in the recycling of 37,325 pounds of rechargeable batteries. Twenty locations throughout Missouri utilized this service in FY16. p. 12

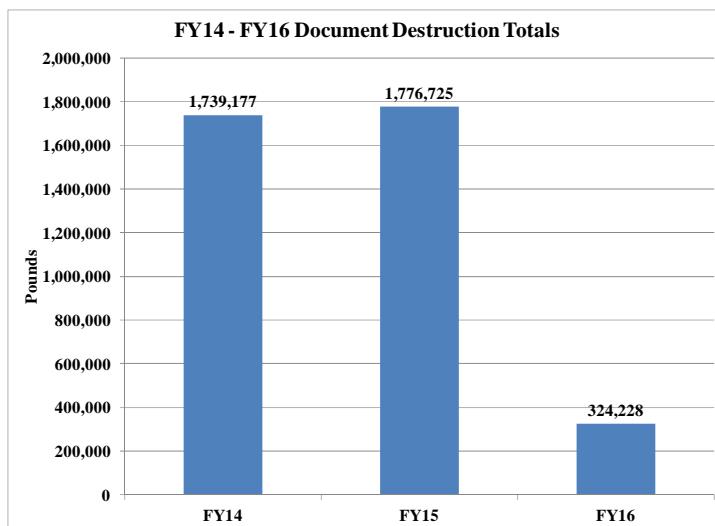
Statewide Recycling Services

Fee-Based Services

Document Destruction Contract

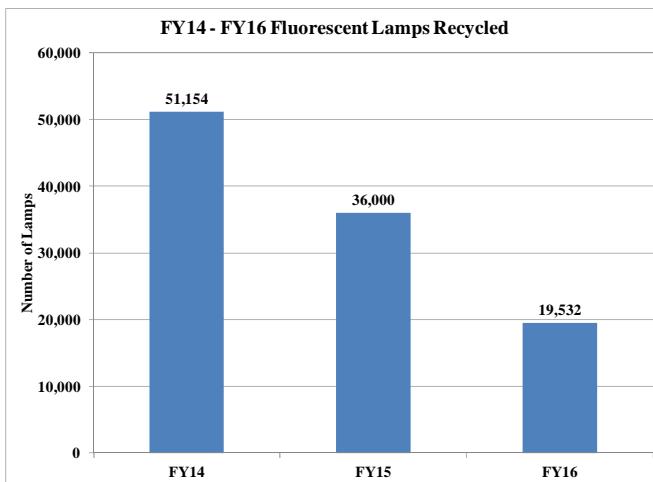
The onsite document destruction services contract was awarded on January 1, 2016. Previous contractors did not submit monthly reports for the period July - December, 2016 which resulted in substantially lower collection amounts for FY16.

Cost for services varied and was based on document volume and the location of the state agency.



Lamp & Ballast Recycling Contract

This contract allowed for the recycling of fluorescent and incandescent lights and related equipment (e.g., ballasts), as well as non-rechargeable batteries. Due to the mercury contained in fluorescent lighting, used fluorescent bulbs are regulated as universal waste in Missouri. Special packaging, handling, and labeling requirements govern the disposal of fluorescent lighting.



There was a significant drop in the number of lamps recycled in FY16 as compared to FY15. This is likely attributable to a project that was finished at the Truman Building in FY15. The



Pallets of used fluorescent lamps ready to ship to the recycling facility

Truman re-lamping project replaced approximately 14,000 fluorescent lamps with LED (light emitting diode) lamps. The State Recycling Program covered costs for several state agencies to recycle fluorescent lamps in FY16.

Measuring the Economic and Environmental Savings of Materials Recycled¹

Energy Reductions (Economic Benefits) Related to Recycling

The amount of material recycled by state employees in FY16 resulted in an estimated reduction in energy use of 213,640,000,000 (over 213 billion) BTUs. This amount of energy is equivalent to ...

- **Conserving 1,858 households' annual energy consumption or ...**
- **Conserving 36,771 barrels of oil or ...**
- **Conserving 1,719,598 gallons of gasoline**

Carbon Dioxide Reductions (Environmental Benefits) Related to Recycling

State of Missouri recycling efforts resulted in an estimated reduction of greenhouse gasses of 20,242 MTCO₂E (metric tons of carbon dioxide equivalent). This is equivalent to ...

- **Removing annual emissions from 4,261 passenger vehicles or ...**
- **Conserving 2,277,701 gallons of gasoline or ...**
- **Conserving 843,414 cylinders of propane used for home barbeques or ...**
- **Conserving 109 railway cars of coal**

The Department of Economic Development, Division of Energy utilized the Environmental Protection Agency's Waste Reduction Model (WARM) as a way to measure the economic and environmental savings of materials recycled by state agencies in FY16.

The WARM model helps us to better understand the benefits of alternative end-of-life waste management decisions such as recycling. This model is a lifecycle assessment tool which considers the energy usage and greenhouse emissions from raw material extraction until product disposal. This includes material assessment, all product transportation, manufacturing, and disposal. The model compares different disposal scenarios such as recycling, landfill, incinerating, composting, and source reduction.

The above carbon dioxide and energy reduction estimates include a majority of the materials listed in the tables in Appendix A of this report. Materials not included in the WARM model calculations include all items listed in the table in Appendix A entitled "Number of Items and Gallons Recycled" (books/bound publications; cell phones; fluorescent lamps; incandescent lamps; printer cartridges; fuel/oil filters; pallets; anti-freeze; cooking oil; motor oil; and paint). In addition, the following items from the "Number of Pounds" table in Appendix A are not included in the WARM model calculations: textiles; batteries (rechargeable/non-rechargeable); and ballasts. These items are not included because the WARM model does not account for these materials.

1. Department of Economic Development, Division of Energy calculated these estimates utilizing the Environmental Protection Agency's Waste Reduction Model (WARM)



FY16 Overview: Annual Recycling Award

Each year the State Recycling Program accepts nominations for the Annual Recycling Award. Employees, departments, or agencies are eligible to be nominated for outstanding contributions made in the areas of recycling collection, waste reduction, and/or recycled content procurement. Members of the Missouri Interagency Recycling Committee review the nominations and vote for an individual and agency award. The State Recycling Program encourages nominators to submit information demonstrating the value of the nominee's recycling efforts.

2016 Annual Recycling Awards

INDIVIDUAL AWARD: Kelly Brunson with the Office of Administration's Division of Personnel earned this years' individual award with a combination of her great passion for recycling and rapport with her fellow employees that has developed through her unique sense of humor.

Kelly's supervisor said, "I've never worked with someone who has such passion for recycling and waste reduction. I have no doubt her efforts within our division have made an impact to Missouri's recycling results."

The person nominating Kelly for the award said, "Kelly excels at communicating recycling information to the Division of Personnel by sending out informative emails to our entire office explaining what can and can't be recycled. These emails also include pictures of recycling containers along with information on what should be placed in each container. Everyone in the office knows Kelly is our "go to" recycling person."



Kelly Brunson

TEAM AWARD: The Department of Natural Resources' Earth Day Committee (DNR) was selected for the 2016 team award.

Educating attendees of the annual Earth Day event about resource conservation is paramount and nine years ago the Zero Waste Challenge (ZWC) was introduced to the event. One of the long-term goals of the ZWC is to strive for zero waste. The challenge for each year's participants is to reduce the amount of waste (trash and recyclables) as compared to the previous year.

DNR distributes information to participants prior to the event to promote the ZWC. Ideas like pre-cycling are covered where participants are encouraged to only purchase items that can be recycled at the event.

During the Earth Day event all waste (trash and recycled material) are audited and weighed. In the last nine years, approximately 1,500 lbs. of recyclables have been collected and recycled. Since inception of the challenge, the amount of trash collected has been cut by 54% and the per capita waste (trash and recycled material) generated has been reduced by 62%.



The Missouri Interagency Recycling Committee was impressed with the long term commitment and goals applied to the Zero Waste Challenge as well as the results of the ZWC. These were key considerations in the Earth Day Committee's selection for the 2016 award.

Front Row L to R: Commissioner Pearson (OA), Brenda Wansing, Laura Payton, Christa Dickneite, Van Beydler, Hylan Beydler, Susan Bloomer, Renee Bungart. Not Pictured: Larry Archer, Stacy Bandelier, Richard Loaiza, Lisa Nahach, Amy Poos and Kendra Swee

FY16 Overview: State Agency Accomplishments

FY16 Annual Recycling Award Honorable Mentions

The State Recycling Program thanks those who took the time to make a nomination and at the same time wants to recognize the patience, passion, and persistence the nominees have exercised with their efforts to reduce, reuse, and recycle state government waste.

- Department of Health & Senior Services | State Health Lab
- Department of Natural Resources | Northeast Regional Office
- Department of Natural Resources | State Parks - St. Joe State Park

Recycling Interns

For the first time in the State Recycling Program's 26 year history, two recycling interns were hired to assist with various projects and operational activities.

Sarah Burchett a sophomore at William Woods and Michaela Krause a freshman at the University of Kansas were immersed into the world of recycling.

Both interns worked on promotional material for use at events such as State Employee Recognition Day and America Recycles Day. They also assisted with an extensive promotional campaign for state agencies in St. Louis.

The interns got involved with day-to-day operational activities such as preparing pallets of printer cartridges to be recycled. They baled cardboard, stretch wrap, and managed rechargeable battery recycling boxes throughout the Capitol Complex.

They provided a great deal of help and ideas on how to improve recycling in state government and brought an element of fun with them. Their contributions to State Recycling were greatly appreciated.



Michaela Krause & Sarah Burchett Showing Off a Bale of Stretch Wrap They Made

State Agency Recycling Efforts Avoid Cost of Waste Disposal

The efforts of agencies statewide resulted in a combined total of **5,936** tons (see Appendix A) of materials recycled in FY16. If this amount of material had been sent to landfills it is estimated the State of Missouri would have paid at least **\$274,303** in waste disposal costs. It is possible to calculate this cost avoidance based on the average tipping fee charged to waste haulers in Missouri. Tipping fees are paid by waste haulers for each ton of trash disposed in Missouri's landfills. The average tipping fee in Missouri was \$46.21² per ton in FY16.

The tipping fee is only one cost of doing business as a waste hauler. In addition to the tipping fee, a waste hauler includes labor and transportation costs in the actual amount charged to its customers. Therefore, utilizing the average tipping fee to calculate cost avoidance represents a conservative estimate.

Over the past 10 years state employees have recycled over 76,000 tons of material saving the State of Missouri nearly \$3.2 million.

p. 16

2. Tipping fee information acquired from Environmental Protection Agency's State Measurement Program.
Link to report: <https://recyclesearch.com/profile/epa-state-measurement/report/206>

State Recycling Program Organizational Changes

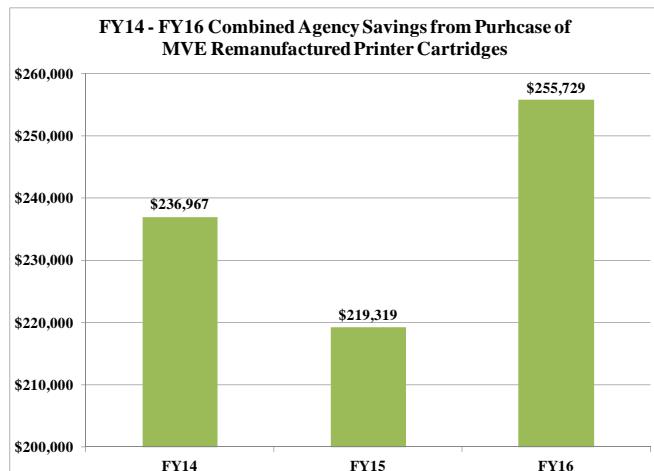
In August, 2015 the Missouri State Recycling Program was moved from the Office of Administration's (OA) Division of Purchasing to OA's General Services Division. The State Recycling Program was created in 1990 and located in the Division of Purchasing & Materials Management as the division was called at that time. In addition to the State Recycling Program moving, the Missouri State Agency for Surplus Property was also moved to General Services.

With the organizational changes OA's Commissioner said, "OA is on the move to make our organization better and stronger and more responsive." By moving State Recycling and Surplus Property to General Services, these organizations will be better positioned to assist state agencies with managing materials whether these are recyclable or surplus property.

Remanufactured Toner Cartridges: State Agency Savings

From FY14 - FY16, state agencies have saved over \$700,000 dollars by utilizing Missouri Vocational Enterprises' (MVE) Printer Cartridge Remanufacturing Service. For more than 15 years, MVE has offered a toner cartridge remanufacturing service for state agencies. This service has provided state agencies an opportunity to realize significant savings and reduce waste by reusing toner cartridges.

The chart to the right illustrates the combined agency savings over the past three years for agencies that purchased remanufactured toner cartridges from MVE. Savings are estimated by calculating the difference in price between MVE toner cartridges and non-recycled toner cartridges available from the office supply contract.



Earth Day and the Zero Waste Challenge



Interagency Recycling Committee
Members assisting an Earth Day
Participant with Proper Sorting

2016 marked the 9th year the Zero Waste Challenge (ZWC) has taken place at the Department of Natural Resources' Earth Day event. One of the long-term goals of the ZWC is to strive for zero waste. The challenge for each year's participants is to reduce the amount of waste (trash and recyclables) as compared to the previous year.

The Department of Natural Resources distributes information to participants prior to the event to promote the ZWC. Ideas like pre-cycling are covered where participants are encouraged to only purchase items that can be recycled at the event.

Zero Waste Challenge (continued)

During the Earth Day event all waste (trash and recycled material) are audited and weighed. In the last nine years, approximately 1,500 lbs. of recyclables have been collected and recycled. Since inception of the challenge, the amount of trash collected has been cut by 54% and the per capita waste (trash and recycled material) generated has been reduced by 62%.

The table below shows data from the past three Earth Days. The last column shows the key measure of “per capita waste generation” has decreased each year. This is indication of improvement towards the goal of zero waste where the amount of trash and recycling is reduced.



Earth Day Participant with a Zero Waste Hat

Zero Waste Challenge Measures	Trash (lbs.)	Material Recycled (lbs.)	Waste (trash + material recycled)	% of Waste Recycled	Headcount (number registered)	Per Capita Waste Generation (lbs.)
2014	137.6	160.6	298.2	53.9%	1563	0.19
2015	110	90.7	200.7	45.20%	1163	0.17
2016	139.3	90.8	230.1	39.5%	1500	0.15

Carpet Recycling

FY16 was a big year for carpet recycling as state government recycled two truckloads of carpet tiles (70,230 lbs) from the Truman Bldg. This is equivalent to 126 cubic yards of material. Recycling carpet tiles saved the state an estimated \$1408 in disposal costs.

The carpet was manufactured by Interface, Inc. and was original to the building when it opened in 1983. Amazingly, Interface is the same company that picked

up the carpet tiles to be recycled. All at no cost to the state.



Truman Dock Personnel Loading Carpet Tiles on the Truck



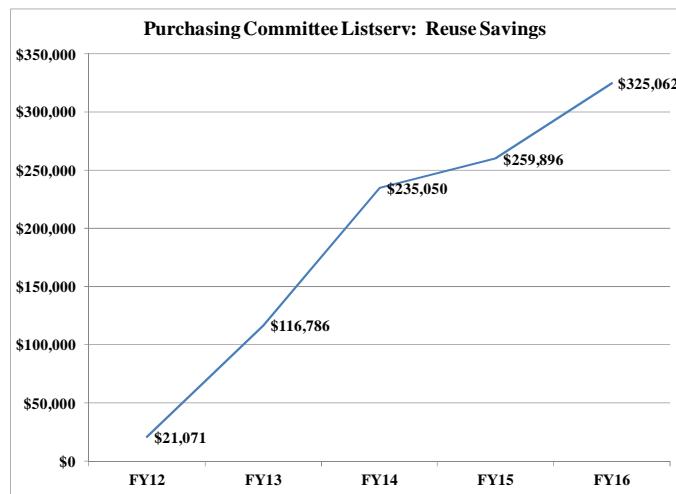
Pallet of Carpet Tiles Ready to Ship for Recycling

Here's what Interface's website says about how the carpet tiles were recycled. "When we bring old modular products back into our ReEntry process, our technology cleanly separates carpet tiles into face cloth and backing. We send face materials to other companies for recycling, but our proprietary technology can turn the old backing into new backing. We convert the separated backing into pellets, which we feed to our Cool Blue™ system to create GlasBac®RE backing (98% recycled content)."

Surplus Property Reuse on the Rise

Over 500 state employees used the Purchasing Committee (purchcomm) listserv in FY16 to streamline the surplus property disposal process and save money. Essentially, the listserv is an email distribution list that allows agencies to communicate with other state agencies about property that is no longer needed. Purchcomm may also be used to find items that an agency needs to acquire. For FY16, it is estimated state agencies saved over \$325,000 as a result of utilizing the

purchcomm listserv. The savings measured in FY16 marks the most savings generated for state agencies since this measure was implemented in FY12.



A state employee must subscribe to the listserv in order to participate with the purchcomm listserv. Since State Surplus Property policies apply to distribution of property via the listserv, it is a good idea for employees who normally handle disposal of property to subscribe. The Purchcomm listserv subscription page is available at <http://lists.mo.gov/mailman/listinfo/purchcomm>.

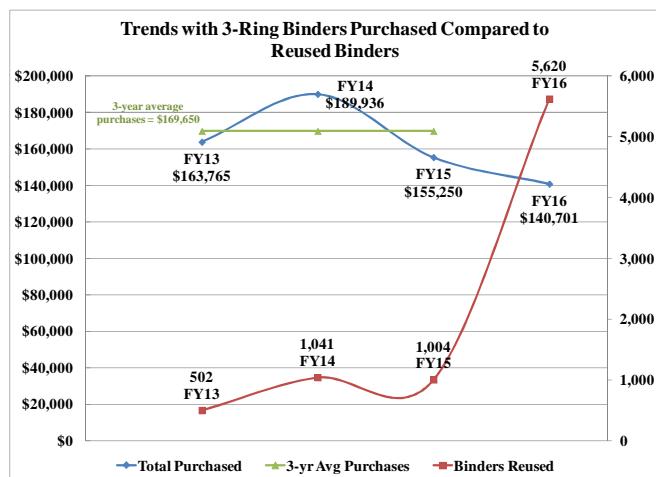
Savings from Reuse

The State Recycling Program measures the number, sizes, and values of 3-ring binders that are exchanged between state agencies on the Purchasing Committee listserv. The value of these reused binders is estimated based on current office supplies contract pricing.

In the graph below, the blue line shows total purchases of 3-ring binders from FY13 - FY16. The green line represents the 3 year average (FY13 - FY15) of binders purchased. Annual purchases for FY15 and FY16 were below the 3-year average which suggests that reuse of binders may be having an impact on annual purchases.

The red line shows the number of 3-ring binders that were exchanged (reused) on the listserv. As the number of binders reused has gone up the annual purchases have gone down. This correlation also suggests that exchange of binders for reuse through the listserv is resulting in fewer purchases of binders from the State's office supplies contracts.

For additional information please see the FY16 "Goal #2" on page 7.



University of Missouri - Kansas City Places 2nd in National Recycling Competition



After claiming 1st place in 2013 and for the third year in a row, the University of Missouri - Kansas City (UMKC) placed 2nd in the Grand Champion contest for the 2016 national RecycleMania competition. UMKC's 81% recycling rate was only .5% behind the winner of this competition. This means that only 15% of the waste generated at UMKC was sent to the landfill during the competition.

RecycleMania is a competition among colleges and universities in the United States that provides schools with a fun, proactive opportunity to increase awareness about waste prevention and recycling on their campus. Over a 10-week period, schools compete in different contests to see which institution can collect the largest amount of recyclables per capita; the largest amount of total recyclables; least amount of trash per capita; or have the highest recycling rate.

Other notable achievements for Missouri schools in 2016 include:

- After finishing in 14th place in 2015, UMKC jumped in the standings for the Waste Minimization competition to 10th place in 2016.
- Washington University - St. Louis jumped from 19th place in 2015 to 11th place in 2016 in the Gorilla Competition.
- Northwest Missouri State improved its run in the Bottles & Cans Competition from 44th place in 2015 to 30th place in 2016.
- Missouri State University leaped from 58th place in 2015 to 32nd in 2016 for the Paper Competition.
- Northwest Missouri State bested its 46th place finish in 2015 to 33rd place in the Organics Competition.

Missouri Schools Placing in the Top 50 for RecycleMania Competitions

<u>Grand Champion Competition</u> (209 participating)
University of Missouri - Kansas City (2nd)
<u>Per Capita Classic</u> (274 participating)
Washington University - St. Louis (24th)
<u>Waste Minimization</u> (116 participating)
University of Missouri - Kansas City (10th)
Missouri State University (27th)
<u>Gorilla Competition</u> (278 participating)
Washington University - St. Louis (19th)
<u>Bottles & Cans Competition</u> (101 participating)
Northwest Missouri State University (30th)
Missouri State University (42nd)
<u>Cardboard Competition</u> (125 participating)
Missouri University of Science & Technology (28th)
Northwest Missouri State University (50th)
<u>Paper Competition</u> (109 participating)
Missouri State University (32nd)
<u>Organics Competition</u> (157 participating)
Northwest Missouri State University (33rd)

In addition to the schools placing in the Top 50, the following Missouri schools participated in the 2016 national competition:

Saint Louis University - Main Campus

The State Recycling Program applauds Missouri's colleges and universities for their participation in the national RecycleMania competition. (www.recyclemaniacs.org)

FY16 Overview: Recycled Content Procurement

State Agencies Close the Loop with Paper Procurement

In FY16 68% of agency paper purchases included recycled content. The State of Missouri spent \$888,968 on recycled “Fine Paper Products” in FY16 for approximately 30,654 cases of recycled paper. A majority of this paper is printer/copier paper made with 30% post-consumer recycled paper. Purchasing this type of recycled paper versus virgin paper translates into the following estimated savings³:

- ♻ 5,652 trees
- ♻ 2,641,975 gallons of water – 4 olympic sized swimming pools
- ♻ 487,128 pounds of CO₂ equivalent – 44 fewer cars per year
- ♻ 176,857 pounds of solid waste – 6 less garbage trucks
- ♻ 2.5 billion Btu – enough energy to power 24 homes in Missouri for a year!

FY16 Purchases of Recycled Paper Compared to Virgin Paper

Product Category	Recycled Paper Purchases	Virgin Paper Purchases	Recycled Paper Purchases as a % of Total Purchases in Product Category		
	FY16	FY16	FY16	FY15	FY14
Fine Paper Products (office, copy,fax)	\$888,968	\$1,673,675	35%	43%	44%
Course Paper Products (napkins, towels, tissues)	\$3,486,895	\$154,353	96%	92%	94%
Forms (continuous & snap out)	\$301,200	\$1,489	100%	100%	97%
Envelopes (Plain or Printed)	\$1,179,091	\$296	100%	99%	98%
Printing by contractors (40% of total charge is attributable to paper - figures appearing in this row represent paper cost only)	\$369,727	\$1,067,389	26%	24%	22%
Overall Totals	\$6,225,881	\$2,897,202	68%	66%	66%

RSMo 34.032 established attainment goals for state agencies to purchase certain percentages of products made from post-consumer recovered materials. Starting in 1991 the goal was set at 10% of paper purchases were to be manufactured from post-consumer material. The goal was increased to 60% for the year 2000 - the last year a goal was specified. Note: See Appendix B for additional information about paper purchases as well as non-paper recycled-content product purchases.

p. 21

3. Environmental impact estimates were made using the Environmental Paper Network Paper Calculator Version 3.2.1. For more information visit www.papercalculator.org.

FY16 Overview: Missouri's State Recycling Fund

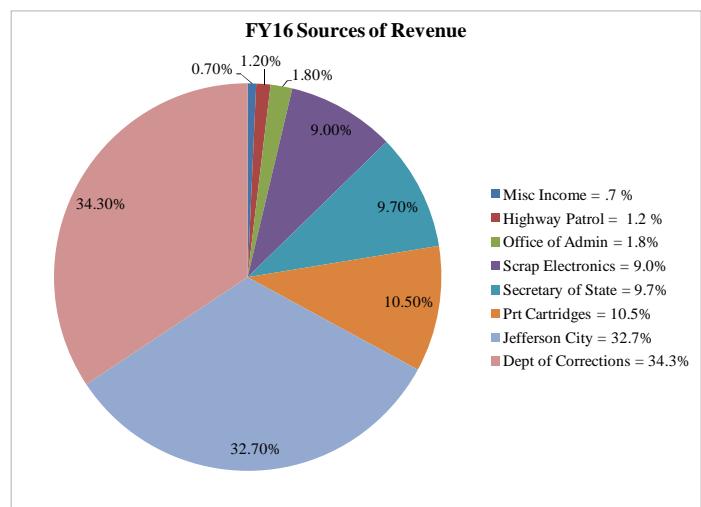
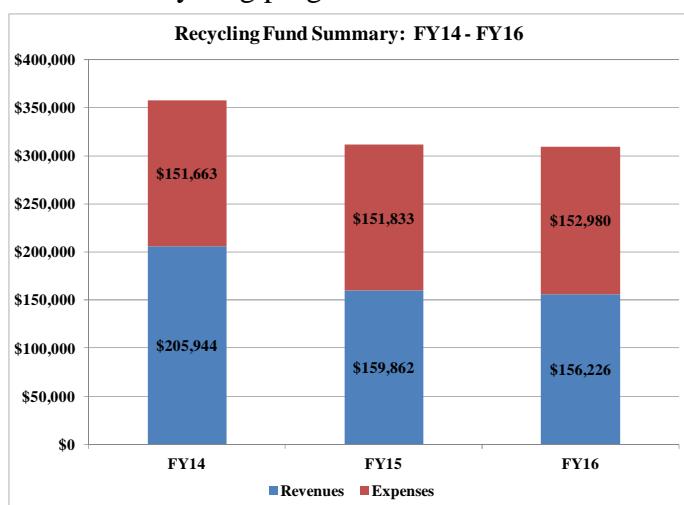
Missouri's State Recycling Fund was established by RSMo 34.032 and states that "Proceeds from the sale of recycled materials may be used to offset costs of the recycling program."

Recycling revenues dropped 2 percent from FY15 to FY16. This revenue decline mirrors the national and international declines in the recyclable commodities markets.

In FY16, recycling funds helped to further the following recycling efforts throughout state government:

- Distribution of 13,000 plastic bags for can, bottle, and paper collection
- Purchase of over 500 recycling containers
- Distribution of 600 recycling labels and signs
- Purchase of a baler for Southeast Correctional Center (Charleston)
- Fluorescent lamp recycling fees
- Containers for the Department of Revenue's paper recycling program
- Baler supplies and maintenance
- Supplies for in-vessel composters located at Ozark Correctional Center and Northeast Correctional Center

Expenses listed in the bar chart at the top of this page include operations, salary, and fund transfers to the Heating Assistance Program.



The top three sources of revenue in FY16 were the Department of Corrections (**34 percent**), the Jefferson City recycling contract (**33 percent**) and printer cartridge recycling (**11 percent**). (see chart above)

Contributions to the Heating Assistance Program (Utilicare)

Excess revenues from the sale of recyclable materials are transferred to the Heating Assistance Program managed by the Department of Social Services pursuant to RSMo 34.032. The Heating Assistance Program (HAP), also known as Utilicare, provides financial assistance to low-income Missourians for heating their homes during winter months. The MSRP has transferred a total of **\$350,000** to the HAP since 2004.

As a result of state employee recycling efforts, the MSRP made a \$30,000 contribution to the HAP in FY16. The \$30,000 transferred to the HAP in FY16 will help approximately 150 households in Missouri to pay their heating bills.

III. Recycling Resources

Missouri State Recycling Program

Office of Administration

Division of General Services

Internet: <http://oa.mo.gov/general-services/missouri-state-recycling-program>

Email: recycling@oa.mo.gov

Phone: **573-751-3384**

The Missouri State Recycling Program (**MSRP**) works with state agencies to increase purchases of recycled content products, reduce their waste stream and increase collection of materials for recycling. The MSRP web page is a good resource for state contracts that offer recycled content products as well as recycling services.

Environmental Improvement and Energy Resources Authority / Market Development Program

Missouri Department of Natural Resources

Internet: <http://eiera.mo.gov/mo-market-dev-program/>

Email: eiera@dnr.mo.gov

Phone: **573-751-4919**

The **Missouri Recycled Products Directory** is published by the Market Development Program. An excellent resource for finding Missouri based businesses that manufacture or distribute recycled-content products. The directory is available online at <http://missourirecycledproducts.com/>

Solid Waste Management Program

Missouri Department of Natural Resources

Internet: <http://www.dnr.mo.gov/env/swmp/index.html>

Email: swmp@dnr.mo.gov

Phone: **800-361-4827** or **573-751-5401**

The Solid Waste Management Program (SWMP) works with citizens, businesses, industry, and government to continue increasing material reuse and recycling. The SWMP web page is an excellent resource for information dealing with all aspects of solid waste management in Missouri.

Missouri Vocational Enterprises (MVE)

Missouri Department of Corrections

Internet: <http://www.doc.mo.gov/mve>

Phone: **800-392-8486** or **573-751-6663**

The Department of Corrections vocational training program offers the following products and services that meet “buy recycled” criteria. MVE products and services are only available to state agencies and other tax-supported entities.

MVE Recycling/Remanufacturing/ Refurbishing Services

- Toner Cartridge Refill Service
573-751-3224 ext. 1260
- Furniture & Office Panel (cubicle) Refurbishing
573-751-6663 or **800-392-8486**

MVE Recycled-Content Products

- Cardboard boxes: 35 percent post-consumer content
- Plastic bags: 30 percent recycled material
- Metal products: 28 percent post-consumer content
- Toilet paper: 100 percent recycled material
- Envelopes: 30 percent post-consumer content

IV. Appendices

Appendix A: Department reports of materials recycled

- ∞ Pounds
- ∞ Number of Items
- ∞ Gallons

Appendix B: Department reports of recycled-content product procurement

- ∞ Non-Paper Recycled-Content Products Procured
- ∞ Recycled-Content Paper Products Procured

Appendix A: FY16 Department Reports of Materials Recycled

Number of Pounds Recycled	Transportation																		Totals by Material	
	Agriculture	State Treasurer	Conservation	Corrections	Elementary & Secondary Educ.	Health & Senior Services	MCHCP	Mental Health	Natural Resources	Office of Administration	Public Safety	Revenue	Secretary of State	Senate	Social Services	State Courts Administrator	Transportation			
Aluminum	2,000		242	90,991		360		1,730	5,928	1,592	400						123,660			
	C	C	C	C	C	C		C	C	C	C	C	C	C	C	C	C	245,327		
Ballasts			196	2,765				20	1,000	5	170							1,148	5,304	
Batteries-Non Rechargeable			150	1,447		15			300	246	107	2,100						273	4,663	
Batteries-Rechargeable			59	1,045		12		3,600	34	82	3,582	41,606				12		247	50,279	
Cardboard	4,500		700	1,150,996		C	C	C	130,145	20,142		9,850	54,544					14,960		
	C	C	C	C	C	C		C	C	C	C	C	C	C	C	C	C	1,922,599		
Commingled				3,280					79,467										115,816	
Electronic Scrap			150	10,147	740	5,010	256	2,148	40,640	8,050	11,236	21,786	764		1,864	12,285	2,528	260	349,048	
Food-Yard Waste				367,510					14,000	6,190		400							388,100	
Glass			500						8,121										8,621	
Magazines & Catalogs				25,407					831	1,482		190							27,910	
Mixed Office Paper	980	3,903	6,610	98,622	1,782		6,296		63,102	21,215		206,525	551,200	380,610		28,332		33,460		
	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	3,003,194		
Newsprint	4,000		100	837					7,509	1,165		25							13,636	
Plastic	4,120		3,247	19,095		2,875		C	C		5,966	1,255	100		7,789					
	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	58,622		
Rubber, Scrap Tires	1,785		4,410	7,770					63	310	25,910	107,365							647,320	794,933
Scrap Metal	5,480		2,500	228,553		43,180			600	29,070	158,753	91,240	145,320	29,040					3,315,480	4,049,216
Telephone Books									315	319		15							649	
Textiles				4,039							14	1,350							5,403	
Tin / Steel Cans		C	C	100	747,620		C	C	C	C	7,173	91							759,421	
Totals Reported by Agency	22,865	3,903	18,964	2,760,124	2,522	51,452	6,552	2,148	4,220	296,499	317,532	135,106	537,032	635,548	388,399	1,864	40,629	2,528	4,136,808	11,872,971
																			5,936 tons	

Note on Boxes with C's: A "C" in a box on this table indicates an agency recycled the designated item by utilizing the Jefferson City (JC) recycling services contract. Materials collected via the JC contract include **Aluminum, Cardboard, Mixed Office Paper, Plastic, and Steel (tin) Cans**. A box that has a number over a "C" indicates the agency reported material that was recycled statewide, but not reported in the JC contract figures. For example, Public Safety reported 400 pounds of aluminum recycled and Public Safety offices in JC utilized the JC Recycling Services contract to recycle aluminum.

p.25

Note on "Totals by Material": This column includes collection totals as reported by the recycling contractor for the following materials: **Aluminum, Cardboard, Carpet, Commingled, Electronic Scrap, Mixed Paper, Plastic, and Steel Cans**. These figures are summarized in a table in Appendix A. Agencies that utilized a recycling contract, but do not appear in this table include: **Economic Development, Higher Education, Environmental Improvement Energy Resources Authority, Lottery, Tax Commission, MOSERS, Governor Office, Attorney General, Auditor, Supreme Court, and House of Representatives**. Amounts of materials recycled by these agencies are included in the "Totals by Material" column. (see explanation under "contractual reporting" in Appendix A)

Appendix A: FY16 Department Reports of Materials Recycled

Summary Information for Table on Page 25 for Contractual Reporting and Other Recycling Services
 Total pounds recycled by agencies utilizing the Jefferson City, St. Louis, Kansas City, and Onsite Document Destruction recycling contracts are summarized in the table to the right. These figures are reported as cumulative totals. Due to contract reporting, data is reported by building and it is not feasible to separate data by agency where there are multiple agencies in the same building.

FY16 Total Pounds Recycled via Contracts	Jefferson City	St. Louis	Kansas City	Onsite Document Destruction
Mixed Office Paper	1,252,369	12,513	7,772	324,228
Cardboard	525,039	1,875	9,848	
Commingled		33,069	1,225	
Aluminum	18,424			
Plastic	13,588			
Steel Cans	4,437			

FY16 Total Pounds Recycled via Other Agreements	Electronic Scrap	229,959
	Carpet Tiles	70,230

Pounds recycled by agencies utilizing other recycling service agreements is summarized in the table to the left.

Number of Items and Gallons Recycled Table

Departments Reporting	Number of Items Recycled							Number of Gallons Recycled					
	Books, Bound Publications	Cell Phones	Fluorescent Lamps	Incandescent Lamps	Printer Cartridges	Fuel/Oil Filters	Pallets	Anti-freeze	Fuel, Diesel	Fuel, Gasoline	Oil, Cooking	Oil, Motor	
Agriculture											1,500	200	
Conservation			766	24				50			20	2,420	
Corrections	2,607	52	4,768	4,080	3,654		11,908	60			300	2,061	
Economic Development					13								
Elementary & Secondary Education					8								
Health & Senior Services		17			88								
Mental Health		9	633	272	1,703	5	776				1,923	140	
Natural Resources		52	2,008		820			10,578	70,889	137,370		53	
Office of Administration		24	9,977		57		113	55				2,360	
Public Safety	200	64	5,500		2,729	9,600	825	100			541	13,789	
Revenue					460								
Social Services					140								
Transportation			462		2,791			1,540				9,509	
Treasurer's Office					152								
TOTALS	2,807	218	24,114	4,376	16,068	9,605	13,622	12,383	70,889	137,370	4,284	30,532	240

Note on Total Printer Cartridges: 3,453 printer cartridges were recycled by employees using a statewide service for this item and are included in the TOTALS amount shown in this table. **Note on Agency-Specific Printer Cartridges:** Figures appearing for individual agencies may not be an accurate reflection of the number of printer cartridges recycled. In some buildings agencies utilize a centralized recycling drop-off for cartridges and it is not feasible to separate agency data once recycled. See p.12 "Printer Cartridge Recycling" for additional explanation.

Appendix B: FY16 Department Reports for Recycled Content Product Procurement

Non-Paper Recycled Content Procurement														Category Totals			
Senate		Treasurer's Office		Social Services		Secretary of State		Revenue		Public Safety							
Batteries, Rechargeable							\$723								\$723		
Carpet / Construction Materials			\$816					\$419		\$3,314			\$3,414		\$278,379		
Cardboard Boxes			\$13,835	\$151	\$1,636	\$123		\$412	\$695	\$62		\$2,775		\$1,281	\$258	\$107,590	
Janitorial Supplies			\$221	\$80,325		\$15,139		\$395	\$13	\$1,514	\$8,590	\$1,706	\$13,146			\$591,550	
Metal Products				\$7,071		\$2,221			\$3,113	\$1,056	\$17,940		\$74,689	\$4,124,898			\$4,712,804
Office Supplies	\$849		\$46,147				\$2,573		\$1,671	\$2,721		\$2,041				\$5,438	\$610,725
Park Playground Supplies											\$59,385						\$59,385
Printer Cartridges, Remanufactured			\$187,451	\$1,532	\$3,009	\$9,225			\$62,120	\$9,870	\$5,068	\$27,091	\$52,019		\$14,394		\$371,779
Promotional Products											\$2,884						\$2,884
Recycling Containers & Equipment											\$19,274						\$19,274
Remanufactured Furniture																	\$315,979
Vehicle Maintenance Supplies				\$100						\$700		\$18,952					\$19,752
Agency Totals	\$849	\$221	\$335,745	\$1,683	\$22,005	\$9,348	\$2,968	\$3,538	\$68,175	\$101,452	\$48,314	\$119,742	\$4,176,917	\$1,281	\$3,414	\$14,394	\$5,696

Total Dollars Spent on Non-Paper Recycled-Content Products in FY16 = \$7,090,823

Notes: When adding figures in each row the following needs to be considered. **Carpet** contractors reported agency purchases of **\$239,087**. **Construction Materials** contractors reported purchases of **\$34,643**. **Office Supplies** contractors reported purchases of **\$600,636**. MVE provided procurement figures for **Cardboard Boxes** (\$107,461); **Janitorial Supplies**-plastic bags (\$589,420); **Metal Products** (\$587,906); and **Remanufactured Furniture** (\$315,979). When adding the figures in each row -- these amounts need to be included in the sum. For additional information on recycled-content products and services from MO Vocational Enterprises see p. 23 of this report.

Appendix B: FY16 Department Reports of Recycled and Virgin Paper Purchases

This table provides detail for the summary chart appearing on page 19 of this report.

GRAY HIGHLIGHT = VIRGIN

BLUE HIGHLIGHT = RECYCLED

FY16 Department Detail of Recycled & Virgin Paper Purchases	Fine Paper Products (printer / copier paper)	Course Paper Products (toilet paper / paper towels)	Forms - Continuous & Snap Out (high speed printers)	Envelopes	Printing by Contractors
Judiciary (100)	\$7,171				
		\$4,009			
SOS (231)	\$19,862				\$130,685
Auditor (251)	\$1,997				
STO (272)	\$4,599	\$557			\$4,530
	\$6,917	\$122		\$9,465	
AGO (282)	\$18,574				
OA (300)	\$625,897	\$30			\$1,476,295
	\$2,320		\$300,000		
MDA (350)	\$9,677	\$27,554	\$129		\$74,332
DIFP (375)	\$6,426				
	\$3,480			\$3,321	
MDC (400)	\$12,540				
	\$671,666	\$1,150			
DED (419)	\$11,981				
				\$947	\$184,600
DESE (500)		\$236			
	\$80,606	\$22,469		\$69,842	\$3,716
DHE (555)					
		\$307			
DHSS (580)	\$42,574	\$2,360			
		\$188		\$55	\$76,466
MoDOT (605)		\$1,568		\$275	
DOLIR (625)	\$21,827				\$13,450
DMH (650)	\$47,155		\$1,360	\$21	\$1,787
	\$655	\$97,182			
DNR (780)	\$400				
	\$29,683	\$21,361		\$6,798	\$131,664
DPS (812)	\$51,898	\$21,823			\$18,282
	\$15,922	\$65,214	\$1,200	\$9,731	\$222,210
DOR (860)	\$45,778				\$358,096
		\$2,091			
DSS (886)	\$347,020				\$29,381
	\$58,752	\$28,021		\$217,910	
DOC (931)	\$398,299	\$100,226			\$6,415
	\$18,967	\$1,446,569		\$278,465	\$131,029